Amendments to the Claims

1-9. (Canceled)

10. (Currently amended) A method of plasma etching a wafer, said method comprising:

coupling a chuck to a rotatable pedestal, the pedestal comprising a central bore having disposed therein a central hollow shaft ~~disposed therein~~ for communicating a gaseous coolant, the chuck and the pedestal cooperating to define a coolant chamber ~~in fluid communication with~~ for receiving and maintaining the gaseous coolant from the hollow shaft~~, the hollow shaft capable of the one-way communication of a gaseous coolant to the coolant chamber~~;

coupling the wafer to the chuck;

rotating the pedestal so as to rotate the coupled wafer; and

plasma etching the rotating wafer while cooling the chuck by communicating the gaseous coolant through the hollow shaft to the coolant chamber, and maintaining the gaseous coolant in the coolant chamber.

11. (Canceled)

12. (Canceled)

13. (Currently amended) The method of claim 10 wherein the ~~pedestal includes a push rod having a coolant passage, the coolant passage being in communication with a coolant source and a coolant chamber defined by the chuck and the pedestal~~ central hollow shaft is capable of moving vertically between a wafer unloading position and a wafer clamping position.

14. (Currently amended) The method of claim 10 wherein ~~the chuck includes~~ the step of coupling the wafer to the chuck comprises coupling with an electrostatic clamp.

15. (Previously amended) The method of claim 10 further comprising the step of initializing process parameters, the process parameters comprising gas flow, process chamber pressure, wafer temperature, and pedestal rotation speed.

16. (Currently amended) The method of claim 10 further ~~including~~ comprising the step of unloading the wafer from the chuck after plasma etching, the unloading step ~~including~~ comprising the steps of providing a lift actuator coupled to a push rod and a spider and actuating the lift actuator, the push rod pushing the spider to move the wafer away from the chuck in response to actuation of the lift actuator.

17-25. (Canceled)

26. (Currently amended) A method of plasma etching a wafer by means of a plasma etching machine comprising a process chamber, a rotatable, internally cooled chuck disposed in the process chamber, a clamp coupled to the chuck; a controller coupled to the process chamber and chuck for controlling gas flow and pressure in the process chamber and rotation of the chuck, a pedestal coupled to the chuck and cooperating therewith to define a coolant chamber for receiving and maintaining a gaseous coolant, the pedestal ~~including~~ comprising a central coolant passage ~~in fluid communication with a~~ for communicating the gaseous coolant ~~source and~~ to the coolant chamber~~, the coolant passage capable of the one-way communication of a gaseous coolant to the coolant chamber~~; and a lift actuator coupled to the coolant passage, the coolant passage moving in the pedestal in response to actuation of the lift mechanism to lift the wafer from the chuck, said method comprising the steps of:

coupling the chuck to the pedestal;

coupling the wafer to the coupled chuck;

rotating the pedestal so as to rotate the coupled chuck and the coupled wafer; and

plasma etching the rotating wafer while cooling the chuck by communicating the gaseous coolant through the coolant passage to the coolant chamber, and maintaining the gaseous coolant in the coolant chamber.